2: Schaden--50 E-4,5 (1946-1954) 1962 SM4 Guarani SM4

/46 cont./

171 This is true to such an extent that the annual economic
221 cycle -- which Evans-Pritchard calls the "ecological cycle" (2) --

771 2. /From p. 64 of the original source./
796 Evans-Pritchard, 1940, p. 95.

is basically and primarily a cycle of religious life, a kind of "ecclesiastical year," which accompanies the various subsistence activities, especially the different phases of the cultivation of maize /Port. milho/.

174 It is possible that the intermeshing of the agricultural year
221 with the religious one is linked to the missionary past of the tribe.
241 The celebration in which the ritual gathering of the first maize is
796 done coincides more or less with Christmas, the New Year, and
177 Epiphany, and various aspects of the ceremonies, as well as certain ritual implements, justify the hypothesis, which I shall discuss in another work, that in it there is a series of reminiscences from the time of the reductions. Furthermore, it is possible that there may have been partial coincidence between the ancient cultural tradition of the tribe and the socio-religious rhythm introduced by the Jesuits.

241 As a consequence of the polyculture of all the Guaraní groups,
221 the tasks of tilling the soil are distributed throughout the year.
184 Nevertheless there are periods of very intense work in contrast to others in which there is "more rest."

243 Thus, among the Kayová and the Ñandéva of southern Mato
221 Grosso, the cultivation of maize generally follows the following
[184] calendar: in /47/ May, clearing; from May to June, felling the virgin forest; in August, the burning; from August to October, planting; from March on, the harvesting /Port. quebra/. This is valid for the hard maize, intended for sale. The soft maize, saboró, has already been harvested since the beginning of the year; this is the time of the "new food." For beans (kumandá) there are two planting times. One coincides with that of the maize, the beans sometimes being planted in the same clearing, "mixed," in order to be harvested in the first half of November. These are the so-called "beans of the waters," a name that alludes to the season

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2: Schaden--51 E-4,5 (1948-1954) 1982 SM4 Guarani SM4

/47 cont./

244 221 of the rains, more frequent from November to January. But in December, too, clearings for beans are prepared, followed by planting in January, cleaning in March, and the harvest in early April. Rice, too, is harvested in April. The planting of mandioca [249] is done in May, the cleaning in March of the following year. Sugar cane is planted in May and harvested a year later. Peanuts (mandúi) are planted in January and harvested in July.

241 464 221 In general the time when the work piles up the most is the months of August and September, whereas that of the "new food" is the one of the least activity in the plantings. But the period of the most intense work in the clearing of the village is also that of the changa (recompensed work) in the clearings of the fazendeiros [434] and settlers. And since the changa is one of the few means available to the Indian to obtain some money, many fall behind on their own clearings because they are working for money on the nearby fazendas. It should be mentioned in passing that this is one of the factors of economic disorganization of all the native groups of that region, even the most conservative ones. The problem is [245] aggravated by the changa in the yerbales /stands of yerba maté/, inasmuch as the harvest of yerba maté for its part goes on for 177 182 241 months, from July to October. The impossibility of reconciling the ancient activities with the innovations arising from contact with the white man, and the inability to substitute the latter for the former without further ado, seem to be the principal causes of the cultural disintegration and detribalization of the Guaraní groups of southern Mato Grosso.

243 296 221 To the extent that a social and religious calender exists, it is that of maize. There is one annual social concentration because there is only one harvest of maize, which begins with the great celebration of the Nemongaraí, or, as the Kayová prefer to call it, avatí-mongaraí, "baptism of the maize." Aside from exceptional cases, 243 221 even the saboró maize, which ripens in three or four months, is [171] planted at only one time, in contrast to what is done by other native tribes of America, as in Colombia, who have two annual harvests of maize (3).

3. /From p. 64 of the original source./ Birket-Smith, 1943, p. 33.

/47 cont./

243 In Guaraní tillage the cultivation of maize assumes an importance incomparably superior to any other vegetal species. /48/ [262] [273] [433] Maize, besides being one of the principal sources of food (particularly among the Ñandéva and Kayová), constitutes the principal raw material for the production of chicha (a fermented beverage) and, moreover, is a product that always finds a market outside the village.

243 824 The original maize of the Guaraní is the soft maize, known among the caboclos by the name of saboró. There are those who call it catetinho, thus giving rise to confusion with the hard cateto. [437] Since the saboró is not suitable for trading, the Guaraní are shifting to cultivating at the same time the hard maize, which the Indians themselves also eat. The latter, which takes six months to ripen, is generically given the name of tupí, which indicates that it is a matter of a species of foreign origin, whether from a non-Guaraní tribe or from the civilized world. The Guaraní are fully aware of [177] [437] the distinction between the saboró maize as a traditional cultural element and the hard maize, received from outside in more or less recent times and impossible to reject once there was the necessity to produce for commerce in order to obtain money. [773] There inheres in saboró maize, with its soft kernel, which fructifies from two to three months and ripens in four, a sacred character; it is considered the principal gift of the mythical beings called Djakairá (among the Kayová), and it is also the most suitable for making chicha. The clearings of soft maize and hard maize are done separately, and precautions are taken not to mix the seeds; the kernels of the ears that show signs of crossing are not used for planting. Both are planted only once a year, between the months of August and October, beginning the harvest more or less in January, when the great celebration of the avatí-mongaraí is held.

[184] The names given to the varieties of saboró maize are not uniform; they differ from village to village and, even more, from one [126] [114] subgroup to another. On my travels I collected specimens of some seven or eight varieties, delivering them, for genetic study, to Professor Frederico Brieger of the Escola Superior de Agricultura Luís de Queirós, of Piracicaba. Some are plants of low growth, for which

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reason they are called, according to the group, sometimes avatí mbɨtɨ, sometimes avatí karapé, sometimes avatí mirí. Since in the majority of the varieties the ears are elongated in comparison with those of the hard maize, the designation avatí pukú is also used for them. Furthermore, a distinction is made indicating the color: morõtĩ (white), djú (yellow) or pỹtã (red), or pará (spotted: a mixture of yellow and black kernels).

Of all these varieties the one that stands out for ethnological interest is the avatí djakairá morõtĩ or avatí pukú morõtĩ, with a high stalk and white kernel, the one preferred for making chicha. The Kayová in particular refer /Ills. I-V appear here/ /49/ to it with noticeable respect. "This one is splendid, it does not bear in just any ground"; it does not bear in kaá tim (open country) or in a new clearing, only in the underwood. And it is necessary to "bless the seed," one informant stresses. "This one is very delicate," says another; "one plants the clearing and then does not cross any more; and it is necessary to baptize the land." In reality, the magical and ceremonial precautions are also taken in connection with the other varieties, but, at least among the Kayová, more importance is given to the avatí djakairá morõtĩ.

A fact also interesting for the geneticist is that the Kayová and other Guaraní are afraid that the maize might degenerate. At the Pôsto Indígena Francisco Horta I met a doctor-sorcerer of Ñandéva origin, who told me a curious theory about the subject. It was more or less as follows: There are two varieties of the avatí pukú, morõtĩ and pỹtã, the white and the red. The ancients said that the red one grew next to the white one so that the latter would not degenerate and would always give full-kerneled ears. The red maize originated from the speckled one, and the latter from the white one; it is like the sugar-cane juice, the crusts of sugar in the boiler /Port. rapadura/, and the sugar. The red comes from the white, in the holes that are opened, in an oblique position, in the direction of the rising sun. One plants only white seeds, not red or spotted ones. The red color is an effect of sunlight; the ears become such because of the direct influence of the sun, and they, because of their strength, make the white ones become strong

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[TEXT CONTINUED ON PAGE 56 ]

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243 824 [193] too. The red maize avatí puku pytã, gives "strength" to the white maize, so that the latter will have big and heavy ears. Djakairá was a Kayová Indian who received the white taboró maize from the hands of the "Virgen de los Milagres," in Caácupé, Paraguay, when he was fleeing from the forces of Lopez. -- An abstraction made from the end, perhaps born in the brain of the informant himself, the whole explanation, despite not being very convincing, and not corresponding very well to the demands of our logic, seems to have the merit of showing that the familiarity of the Guaraní with maize and its cultivation, going back perhaps to very ancient times, gives him a perfect notion of the phenomena of degeneration characteristic of this domestic plant: In the impossibility of explaining satisfactorily and in a rational way the empirical data that nevertheless impose themselves on his mind in the form of a "scientific" problem to be solved, the Indian makes use of representations from his supernatural world, but, for that reason, without being satisfied with a solution remaining entirely on the plane of mythical ideas, very much to the taste incidentally, of Guaraní mentality.

243 824 121

243 796 All the activities that refer to the production of maize constitute or may constitute the opportunity for religious ceremonies, particularly among the Kayová. It seems that the frequency of the ceremonies and the special situations in which they should be held depend on the decision and /50/ the criterion of the respective paí or doctor-sorcerer. One paí of the Pôsto Indígena Benjamim [115] Constant in Amambai described to me a whole mongaraí sequence (ceremonies, blessings, "baptisms"), a real ceremonial cycle [192] [824] paralleling that of the tilling of maize. Angá is "to give the blessing," an act that in the village referred to takes place in eight different phases: before the clearing is burned (djadjapó roá roráangá, let us give the blessing of the clearing); on the eve of the beginning of the planting (djahá angá ñanderoá kaýguẽ, let us go to baptize the burned clearing); when the maize is about half a meter tall, that is, when it is a matter of combatting the hũ a só, an insect that eats the leaves (djahá ñañembo'é ñandé avatí rũ arasoré); when the kernel is forming, a time when "rust"

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243 796 824 may occur, "coming from fly larvae" (djahá djarú fiandé avatí mberúre); when green maize can already be taken (djahá djarú fiandé avatí fiahangá); after the first food is prepared with green maize (djahá hovasá fiandé avatí dýgue); and, finally, when the first chicha is made from green maize (djahá djarú kĩvira angá or djahá djaporahéi kĩvira angáre).

241 791 In sum, all that has been said with regard to maize is associated with the supernatural world. It is true that there is mention of corresponding ceremonies too for the other cultivated plants -- mandioca, sweet potatoes, beans, gourd, moranga /Cucurbita pepo/, tobacco, cotton -- but these seem to be limited to the "baptism" of the first fruits, a kind of exorcism of the "first basketful." Every woman puts down her basket, the mynakú, before the cross that is found in front of the house of the paí, in order to "baptize" herself and "in order not to have stomachaches." This is valid for all the products of the clearings, among which maize is distinguished because of providing the marks of a genuine religio-economic calender, to the extent that, as we have seen, one may almost speak of a "maize religion."

244 262 In comparison with maize, mandioca is of secondary importance in the alimentation of the Guaraní. Nonetheless it is considered indispensable, especially in the months in which maize begins to be scarce. It exists at all times of the year and constitutes a permanent basic food of native cookery. For this reason, too, it cannot give rise to any social, or at least ceremonial, rhythm. In the villages of the Paulista coast, mandioca flour, as [177] a consequence of the contact with the alimentation system of the caiçara /caboclos of the coast/ and perhaps also by virtue of the geographic conditions, long ago surpassed maize in importance in [171] native cookery. One should note in /51/ this respect that mandioca always seems to have been more important than maize in the Tupí-Guaraní cultures localized in eastern South America, contrary to what is noted for the slopes of the Andean Cordillera.

2: Schaden--71 E-4,5 (1946-1954) 1962 SM4 Guarani SM4

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informal collaboration (10).

10. /From p. 65 of the original source./ Among the Mbüá of Paraguay they told me about having mutirões -- which they call puxyvõ -- of men and, more rarely, of women. The latter organize them to open the holes in the planting of the maize. Incidentally, these Mbüá consider all of planting women's work, "by divine command," allowing the collaboration of the men only in the case of having few women. Except in fishing with timbo, of collective interest, the puxyvõ /sic/ is made for a certain family, not being accompanied or followed by any celebration. Perhaps this is explained by the fact that the Mbüá are not familiar with any fermented drink, which distinguishes them from the Kayová and the Ñandéva.

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A manifest expression of the solidarity of the local group, which, as has already been emphasized, is reduced in the final analysis to a mere association of great-families, the puxirão represents one of the few co-operative institutions by which the different groups of kindred are linked economically. Besides that, it is quite true, the distribution of the yield from hunting is to be emphasized. But as far as anything else is concerned, mutual aid in the economic sector, although constant and never lacking, takes place on an entirely informal plane. Each family plants for itself and considers itself the owner of its clearings; nevertheless, consumption assumes a quite communitarian form, particularly in times of want. Not noticeably affecting the self-sufficiency and the economic freedom of the different great-families that make up the local group, the exchange of services among them consequently assumes a genuine character of symbiosis.

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881 867 577 not do harm to anyone, do not offend the families of others, do not mistreat anyone, behave well on journeys (that is, do not drink much liquor), have the tasks in the clearing done well, do not mistreat the woman when married" (3).

3. /From p. 98 of the original source./
Schaden, 1948c, p. 102.

[178] This enumeration is particularly interesting because of betraying the consciousness of so many problems that afflict the community in its present phase of cultural transition.

881 [184] [829] Only the Kayová give ritual emphasis to the piercing of the lip of the boys, with ceremonies of a religious stamp and not only measures of a magical nature. For the Kayová the celebration is the event that stands out most in his life cycle. Nevertheless, in the nuclei of southern Mato Grosso the celebration (called there kunumĩ-pepỹ, or kunumĩ-piéta, hybrid form) is doomed to disappear, an inevitable consequence of the dominant [114] new conditions of life in these groups. The data that I have were obtained principally in the village of Amambai.

[156] It is the ñanderú (paĩ) or doctor-sorcerer who decides on holding the celebration. Failing to hold it for a very long period, the community would be the victim of misfortunes. The common [304] interval between one celebration and another, varying according to [561] the number of boys of an age to have their lip pierced (between 8 and 12 years old, more or less) is about four years, on the aver- [628] age. On this occasion the Kayová of two or three neighboring villages gather together.

• [243] In general the kunumĩ-pepỹ coincides in the respective year with the maize celebration, avatĩ-mongaraĩ (ceremonial harvesting of the first maize), which is held when the corn is ripening, that [561] is, from January on. For the piercing of the lip there ought to be about ten boys of the age indicated; those who are more than twelve years old no longer undergo the ceremony. Therefore there are adults who do not have the labial hole. As early as a year [262] in advance the candidates start avoiding heavy food, especially certain game, preferably nourishing themselves with chicha.

3: Watson E-4,5 (1943) 1952 SM4 Guarani SM4

## II. CAYUÁ CULTURE IN THE PAST

121 IN this account of Cayuá culture in the past, "the past" is taken as roughly the time of the European entry, before any considerable alien influence was felt by the Guarani-speakers of the Paraguayan area. The description is partly based on comparative material, that is, contemporary accounts of other Guarani groups; there is no extensive contemporary account of the Cayuá but only random references to them or to peoples who might be Cayuá. It is almost certain, too, that the term "Cayuá" (or its equivalents) was not being widely applied in the early colonial period to the forebears of the people in question.

127 The present description also depends in part on a few, brief, later accounts, Rengger,[33] at the beginning of the 19th century, and von Koenigswald,[34] 121 Sampaio,[35] and Ambrosetti[36] at the turn of the century. Müller[37] and Strelnikov,[38] whose work was done in the early 20th century, are also of some help in reconstruction. Rengger, in particular, and von Koenigswald and Sampaio to a lesser extent, all bear out the contention of great basic similarity between the Cayuá people and their Guarani-speaking neighbors. This certainly puts us on safer ground as far as being able to use comparative material for reconstructing Cayuá culture. It is possible to pick up an early account, even of the coastal Tupi of Brazil, and go down the list of cultural elements, checking off the majority which appear to have been in a general sense common among Cayuá. In the opinion of the writer, due caution has been exercised where aspects of Cayuá aboriginal culture were probably similar to other Tupi-Guarani cultures but where we do not have sufficient material to judge with finality.

### ECONOMY

174* The Cayuá, like their relatives, were primarily agricultural people, as early as we have any information about them. They practiced much the 241 same type of tropical forest agriculture as the Tupinambá groups of the 433 Brazilian coast and must have been nearly identical in agriculture with their Guarani neighbors in Paraguay. Métraux has argued that the agriculture of the Tupi-Guarani peoples in the Paraguay region was somewhat different, as to the importance of the various plants basic to it, from that of the more 174* northerly tribes near the equator.[39] It has been said, for instance, that corn • 243 was more important to the southern groups and manioc to the northern groups, because of environmental differences. However, such differences in agriculture 244 were usually of degree, though perhaps significant. Manioc was, from every 433

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[33] Rengger, 1835. [34] Von Koenigswald, 1908. [35] Sampaio, 1890.
[36] Ambrosetti, 1894 [37] Müller, 1934-38.
[38] Strelnikov, 1928. [39] Métraux, 1928, pp. 65 ff.; p. 102.

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4



indication, quite important to the southern groups and to the Cayuá.[48] Sweet potatoes may have been more important in the south than in the equatorial north, if we consider only the Tupi-Guarani.

Far more impressive than the differences of degree of use of various plants, both wild and cultivated, are the similarities of kind. The list of plants for the north is surprisingly close to that for the south, and it would be interesting to know to what extent the similarity may be explained on the grounds of cultural diffusion and to what extent on grounds of climatic and phytogeographic similarities. The use of wild plants for food is also parallel with the north although plant geography is obviously more directly influential here.

Manioc, corn, sweet potatoes, beans, squashes, peanuts, *cará* (*Dioscorea sp.*), *mangára* (*Aroidea sp.*), *mbakuhá* (a *leguminosa*), watermelons, bananas (?) pineapples, and papaya were among the most important crops. Manioc, corn, and sweet potatoes were the primary crops, to judge somewhat but not solely by the present. Several varieties of manioc were recognized, and probably both the bitter and the sweet were known, although it does not appear that bitter manioc was used to the same extent in the south that it was in the north. A number of varieties of both corn and potatoes were recognized. Corn was distinguished by whether it was the flinty type or the soft, starchy kind and, within the latter class, also by color. The Cayuá, presumably in the past as at present, attempted to keep separate their plantations of different kinds of corn within the limits of their crude appreciation of the manner of intermixture. Sweet potatoes, like corn, were distinguished by color (of the pulp), and about seven kinds were thus named. They range from the whitish, through the purple and reddish kinds, to the light yellow and the bright orange-yellow. The latter are similar to what are sometimes called "yams" in this country. Judging only from the present, little attempt was made to plant and harvest sweet potatoes according to color.

Technologically, the agriculture of the Cayuá was of the familiar tropical slash-and-burn type, with definitely recognized stages in the process. First the small brush and trees were cut, and then the larger trees, though only as many of them as seemed absolutely necessary or possible within the limits of available equipment. (The large trees were not so readily felled, of course, as they are at present by the use of steel axes.) The fallen vegetation was allowed to lie for a while to dry in the sun, the dry winter season of the year usually therefore being chosen for the cutting. When sufficiently dry, or if wet weather impended, the slash was fired. Sometimes slash was piled about the trunks of standing trees or unburned fallen logs by way of gradually

[48] If Neo-Brazilian acculturation today is any indication, it does seem as if the indigenous North developed the use of manioc to a higher degree than the South (and probably developed the use of corn somewhat less than the South). That is, the present-day use of manioc by whites is more developed in the North than the South.

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4



Slashing activity preparatory to burning should be completed somewhat in advance of the end of the dry season, preferably by August. The trunks, limbs, and foliage of the cut vegetation will then be partly dried out in order to burn well. Sometimes the cutting for the coming season may start as early as April. But a surprising number of Cayuá are remiss in attending to their clearing activities in sufficient time to get a good burning. Thus there are complaints of rains which came before they should have and impeded the burning, and other similar difficulties. In 1943, some *kokwé* were still being burned by October 19 while others already had beans and corn, and other plants, well above the ground.

During the agricultural months, which are, of course, the summer months, hunting is relegated by most Cayuá to occasional week-end trips. On these occasions the man may be absent for a day, or even only a half-day, roaming the woods and fields in search of game. At other times, except for an occasional morning or afternoon excursion, made perhaps when the weather is not right for work in the *kokwé*, he will not be able to find sufficient time for hunting. Moreover, a man will use some of the time not needed in agriculture in some other way, such as craft work, repairs about the house, and the like. During the winter, there is more time for hunting, but then it is often bitterly cold for the light clothing the Cayuá wear.

The first fruits ceremony, marked by the "baptism" of new corn, usually comes in late January or February, but the entire harvest, including other crops, may well run from sometime before until sometime after the baptism. This community-sanctioned harvest, however, cannot be considered the termination of all agricultural activity for the year. The plants which the Cayuá say "have no season," notably manioc and sweet potatoes, are not necessarily harvested in the usual sense. They may be left in the ground and merely dug up and used as needed. This activity in some cases continues practically throughout the year, depending only on when the crops were sown.

### The Relative Importance of Agriculture, Fishing, and Hunting

While agriculture has benefited by acculturation in other ways, no large number of important new plants has been taken over. The crops aboriginally most important remain so still, but a few new plants have been adopted which are of some significance to the Cayuá. Among them are two types of sugar cane, widely grown as a delicacy and for addition (the juice) to *cāuī'*. Certain kinds of beans, rice—which is so far grown by only a few—and several garden crops have also been adopted, such as onions and garlic.

The present Cayuá allege that one of their two main varieties of corn comes from the whites (that called *aBaū tupi'*, the hard or flint type), although this is not borne out by the botanical evidence.[125] Nevertheless, Cayuá usages

[125] Cutler, 1946, p. 280.

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4



177 are consistent to a certain degree with their contention. They say that the
243 gods do not approve when large quantities of flint corn are planted and smaller
[173] quantities of the flour type, which is a divine gift. In spite of going this far, however, it is quite obvious that Cayuá now do sometimes plant more *tupi'* than *monoti'*, intending the greater harvest largely for sale. Cutler says, "The flour types appear to be the older form."[126] It is possible, therefore, that the Cayuá have grafted onto some aboriginal distinction between an older and supernaturally sanctioned flour corn (*monoti'*) and a more recent flint type (*tupi'*) the modern rationalization that the latter is white-introduced. The present trading association of hard corn may also have had some influence. In any event, it is clear that some few plants have been introduced to Cayuá agriculture by acculturation and that the aboriginal production ratios between one crop and another have been somewhat changed as a result of white influence.

177 Hunting and fishing have changed less than agriculture but a few acculturational features are to be noted. In fishing, white-introduced metal hooks
178 are used for angling. Machetes are now often used when hunting with dogs;
224 clubs have presumably given way to machetes in this and have disappeared
226 altogether. Firearms are known, and a very few Cayuá possess them.[127] The bow and arrow is the missile weapon used by the largest number, and it does not seem to have suffered basically, either as to variety of arrow points or as to the knowledge of its use, from acculturational change.

177 Technologically, gathering has been largely unaffected and also probably
178 has been little influenced by acculturational factors as to its importance in the
222 total economy. In honey-gathering the machete and axe have provided some
412 advantage over any conceivable aboriginal method. These metal implements
415 are used to cut open the trees or stumps where the wild bees make their nests. Kerosene cans and *aguardente* (Brazilian alcoholic drink made of cane juice) bottles are now also found convenient for catching and storing the honey.

224 Although apparently little affected by acculturation as to technology, the
226 non-agricultural forms of food production are now completely subsidiary. In some respects hunting and fishing theoretically may now even be dispensable.
433 Practically every able-bodied Cayuá man (and woman, within the limits of her status) is an agriculturist. But many men do very little hunting or fishing. Even the motives for these lesser activities are now somewhat special and include the desire for variation of activity and for relief from the largely vege-

[126] *Ibid.*

[411] [127] In 1943 only one person at Taquapiri had a firearm usable for hunting, an ancient Belgian
[648] shotgun, for which he sometimes bought powder and shot and loaded his own shells. A story was current among the Cayuá at that time that "the Government" had issued an order for all firearms to be taken from the Indians. Apparently certain local whites had "cooperated" in this, taking the arms for themselves.

3:Watson E-4,5 (1943) 1952 SM4 Guarani SM4



*177 rather than the *bolicho*—for the little meat not obtained by Cayuá themselves through hunting. Cheap felt hats are used by a number of grown men, probably 439 a majority, and women much appreciate colorful head cloths to use as bandanas. 648 Such "luxury" or non-essential items as shoes, usually for men but occasionally for women, are acquired by those who are able to do so and are [262] principally brought forth for festive occasions such as night dances. (Otherwise everybody goes barefoot nearly always.) By far the most indispensable of [291] trade goods are the metal cutting tools for agriculture, without which the present economy of the Cayuá could little more be maintained than that of the whites.

439 Turning to the Cayuá products which find a market with the whites of the region, we note that at the present time some Cayuá normally sell or barter 648 small amounts of their *kokwé* production every year. Corn, principally the kind known to the Brazilians as *milho duro*, "hard corn" (Cayuá: *aBatí tupí*), is the item of largest sale. It is sometimes sold wholesale, relatively speaking, and not merely in small quantities at a time. Beans occasionally enter into Cayuá dealings with whites but not nearly so frequently as corn, nor usually on such a scale. Manioc and sweet potatoes, probably partly because they are not as easily stored in quantity, rarely are sold to whites except in small amounts for immediate consumption. These latter products do not go to the traders usually but to local settler families who live close by and who may be temporarily short as a result of a poor harvest or bad planning in their own *roças*. (Cayuá occasionally try to obtain similar products for the same reasons • [243] from local settlers.) A few Cayuá now plant rice, which is not a native plant. *[177] Although there would not be sufficient rice for themselves, did they consume much, the product is sometimes traded to the Neo-Brazilians. In connection with corn, at least, a significant number of Cayuá men, perhaps roughly half the total, occasionally (that is, not every year) plant with some intention of a storeable, tradeable surplus destined to the *bolichos*. The quantity is not large in most cases, however.

648 Besides agricultural products, only a few others enter occasionally into 439 Cayuá-Brazilian trade and barter. These are wild honey, infrequently a ham- mock made of *caraguatá* cord, and woven split bamboo strainer-winnowers, 352 which are called in Portuguese *peneiras* ("strainers"). Wild honey is gathered 415 by the Indians primarily for their own use. In years of some surplus, or when a *patrão* or other Brazilian particularly requests honey, the Indians may trade 262 small quantities of their take to local white settlers. Honey is locally considered to have peculiarly potent salutary properties and is hence in demand by Brazilians; it is also a great delicacy to the Indians. The hammocks, which are standard household furniture for the Cayuá, are not normally considered essential by local white settlers, but once in a while one may be in demand for resting purposes—much as we use them in the summertime.[188] Hammocks are

[188] Hammocks have a northern and equatorial rather than a southern distribution among the

3: Watson E-4,5 (1943) 1952 SM4 Guarani SM4



number of workers could produce a modern type house in the amount of time it would take them to build a much larger *tapúi*. Given metal tools, however, the ordinary elementary family can make reasonable headway with the construction of a modern house, especially with the occasional assistance of relatives. (Assistance is sometimes almost indispensable, particularly in the long and repeated trips to the forest to bring building materials, such as thatch and bamboo trunks.) But a man and his wife, even assisted intermittently by close relatives, would move exceedingly slowly in erecting a *tapúi*. In other words, building a *tapúi* is a large-scale operation requiring a number of people, with or without metal tools, whereas the modern house requires only a small work group, granted the machete.[143] Thus the modern small house seems intimately related to the elementary family in the matter of production.

Cayuá dwelling patterns also reflect the present production-consumption unit. At Taquapiri a considerable number of the houses are closely grouped at the same place. With t[illegible]sitory Cayuá occupation of agricultural land, many houses are necessarily s[illegible]d at considerable remove from their *kokwé*, some up to as much as a mile or even more.[144] Moreover, it often happens that a man may have two fields under cultivation, and he may thus have an even greater distance to cover in walking from his house to his agricultural work.[145]

Elementary families (judging from Taquapiri, at least) tend almost uniformly to locate their houses close to those of their nearest relatives. Thus, the elementary family houses are now largely grouped as to what would formerly have been extended family affiliations. At Taquapiri this clustering of houses has resulted in greater distance to go to get to the fields. Even in the case of a

[143] The existing *tapúi* at Taquapiri was built jointly by men from several related families, but families not all related to each other as components of an extended family. The lone *tapúi* now has certain communal aspects, too, not characteristic of other houses.

[144] Judging from the Cayuá settlements that we observed—which were not by any means half of the total in Brazil—the location of houses in relation to fields at Taquapiri may not be typical. For there the largest number of houses is clustered fairly closely giving the settlement much the impression one thinks of in a village. Elsewhere—in the other three settlements of Cayuá visited—the present arrangement of houses, widely scattered in the forest and each usually located in the middle, or on the edge, of its respective *kokwé* was much more suggestive than Taquapiri of the probable aboriginal situation. Even at Taquapiri there are some individuals who have located their houses away from the village cluster and have put them next to or in their *kokwé*. This contributes to the impression that location apart, and not the "village" type, is the older arrangement. It is also possible that the break-up into elementary family units is not in other places so marked as at Taquapiri.

[145] Different kinds of soil are recognized as being favorable to different crops; also, it is believed—probably with justification—that it takes a while for the ants and other plagues to "discover" a *kokwé* newly cut from the forest. Once they "discover" a field, they multiply enough to hamper the growing of crops most susceptible to them. Thus, corn, for example, is almost always a preferred first or second crop in a new *kokwé*. Manioc tends to attract ants very rapidly and therefore has to be shifted frequently. The occupation of agricultural land varies with a number of factors but probably averages around four or five years.